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(54) Title: VETIVER OIL EXTRACTS AS TERMITE REPELLENT AND TOXICANT

(57) Abstract: Extracts of vetiver oil were found to significantly repel termites. In one extract, nootkatone was isolated and found to be a significant repellent and toxicant of termites. Nootkatone significantly decreased food consumption, decreased tunneling behavior, and increased mortality in termites. Nootkatone is an effective repellent and toxicant of termites either by itself or as an addition to other materials or substrates, including mulches made from vetiver grass roots or other wood products. Nootkatone can also be used to protect construction wood from attack by Formosan subterranean termites. Nootkatone as a repellent is non-toxic to humans and other mammals and is environmentally safe. In addition, α -cedrene was found to be a weak termite repellent; and both zizanol and bicyclovetivenol were found to be repellents and toxicants of termites.



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